Schwannoma of the left ulnar nerve: a case report

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Abstract

Introduction

Schwannomas are rare tumours of nerve sheaths. They are mostly situated in the extremities and are often solitary. The majority of these tumours are benign and malignant transformation is extremely rare. These tumours are often diagnosed after histopathological examination. We hereby report a case of schwannoma of the left ulnar nerve which we recently encountered. This tumour was excised completely sparing the nerve.

Case report

A 32-year-old male presented to us with history of swelling over the left forearm from past 4 years. Local examination showed a tender ill-defined swelling over medial aspect of left forearm, measuring 6 × 5 cm. The swelling was excised completely sparing the ulnar nerve. The histopathology revealed it to be a schwannoma.

Conclusion

Schwannoma is a rare nerve sheath tumour frequently diagnosed after a histopathological examination of soft-tissue neoplasm. Resection of the tumour with nerve preservation is the treatment of choice as chance of recurrences is very low.

Introduction

Nerve sheath tumours are tumours that can affect any nerve in the body. Neurofibromas and schwannomas are two benign nerve sheath tumours that commonly occur in adults. Neurofibromas are more common than schwannomas. Schwannomas affect all the age groups and grow very slowly1.

Most often, they are solitary and are frequently located in the extremities, with upper extremities being involved more commonly than lower extremities2. The treatment of choice is resection of the tumour. We hereby report an uncommon case of schwannoma of the left ulnar nerve which we recently encountered.

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Figure 1: MRI showing a well-defined soft-tissue mass within pronator teres muscle.

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Case report

sheath tumours, but differentiating between schwannomas and neurofibromas remains difficult even today. Since the malignant rate and recurrence are very low, resection of the tumour after careful dissection is recommended. There may be slight impairment of the nerve function after the tumour is resected due to dissection and nerve retraction, but it returns to normal after a few months.

Conclusion

Schwannoma is a rare nerve sheath tumour frequently diagnosed after a histopathological examination of soft-tissue neoplasm. Resection of the tumour with nerve preservation is the treatment of choice as chance of recurrences is very low.

Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the editor-in-chief of this journal.

References


Discussion

Although schwannomas are considered to be rare tumours, they are still the most common primary nerve sheath tumours of the hand and wrist. They account for about 5% of all the benign soft-tissue neoplasms.

Schwannomas are well-encapsulated benign tumours with a true capsule. Microscopically, two types of cells have been described namely Antoni A and Antoni B, which are found in typical schwannomas. The tumour cells are considered to be strongly immunopositive for the S-100 protein. The most frequently affected peripheral nerve in schwannoma is the median nerve.

MRI is considered to be the most important radiological imaging technique for diagnosing the nerve cells with round-to-oval nuclei. Collection of lipid-laden cells and cystic changes are also seen. Features are consistent with schwannoma of the ulnar nerve.

Figure 2: Intraoperative view of the tumour.

The most frequently affected peripheral nerve in schwannoma is the median nerve.

Figure 2:

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